

## Elaine McCluskey

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**From:** Elaine McCluskey [mccluskey@fnal.gov]  
**Sent:** Wednesday, November 24, 2004 3:04 PM  
**To:** Bill Foster; Chuck Federowicz; David Finley; David Harding ; Dixon Bogert; Duane Plant; Ed Crumpley; 'Erene Noyola'; fgarcia@fnal.gov; 'Margie Bruce'; Rich Stanek; Shekar Mishra; 'Steve Geer'; Tom Lackowski; Vic Kuchler; Weiren Chou  
**Subject:** Notes from 11/24/04 Linac Proton Driver Meeting - Civil

### **NEXT MEETING WILL BE 12/1/04 IN conFESSional AT 9:30 A.M.**

Attendees: Bill Foster, Fernanda Garcia, Chuck Federowicz, Vic Kuchler, Tom Lackowski, Rich Stanek, Weiren Chou, Elaine McCluskey

#### Items discussed:

1. Site Plan
  - a. Location of Debuncher/Transport Line building was discussed again. Position just east of Kautz Rd is the best location for the machine. Concerns from a construction viewpoint: existing utility corridor in this area, square shape of building shown. Concluded building could be klystron gallery width (20' x 50' required for one modulator segment). Additional space would also be provided for other utilities for the tunnel. Overall, could be rectangular building no narrower than 20 ft.
  - b. Intersection at MI-10: amount of tunnel to be demolished and reconstructed was reviewed. Questioned whether 8 GeV tunnel will still be required. Not sure. If this is built early in project, would need to keep it to run MI. Drop hatch idea eliminated in this vicinity.
2. SNS – Dixon related some information from his most recent trip last week.
  - a. Tunnel is very wide and not efficiently laid out for utilities
  - b. No alcoves, although they were suggested early in the review stage and rejected.
  - c. Low energy dump is temporarily installed
  - d. Cryo modules were to have been tested at JLab, but this didn't work out. Will all be tested in place at SNS. Don't have test station at SNS.
  - e. Logistics for installation have been from each end of linac. About 1/3 cryo modules were installed from upstream end, but this is now blocked off, so remaining are coming from downstream end. Drive in access is available at downstream end due to hillside configuration.
3. Installation logistics
  - a. In light of SNS info, concluded that access near Pump Building would be advisable. Much discussion as to best way to accomplish. Covered ramp from grade would be very steep and/or very long. (also expensive) Not sure if this is better than drop hatch, crane, and horizontal 180 or 270 drive around access.
  - b. Tom suggested 8GeV line could be used as entry point for ramp possibly if it's not needed for program.
  - c. Dixon suggested full scale model mockup similar to what was done for MI, to allow both conventional and technical aspects of construction to be reviewed.
4. Stairs – reviewed revised tower stair. Bill suggested for middle access stair to have double alcoves with stair under the tunnel and two stairways into alcoves, plus stairway up to cryo bldg.
5. Linac/gallery cross-section
  - a. Location of cryo piping into linac was discussed. Don't want to put pipes under building due to ODH hazard. Thought it could come over klystron gallery and then drop vertically into tunnel through berm into alcove. Probably don't want to angle piping into tunnel. Add this piping to cross section drawing.
  - b. Need to have cryo folks come to next meeting to discuss, including how this branches out into tunnel.
6. Naming of drawings – concluded that CD-0 will appear in middle of title block, to indicate status. Drawing numbers will be 1, 2, etc.
7. Bill mentioned Dec 9<sup>th</sup> workshop being organized by Weiren to discuss H- and transport. Could get better information about injection dump from this meeting.

ITEMS FOR NEXT WEEK:

Drawings should be essentially complete  
Information about SNS linac width  
Cryo folks to visit

ACTION ITEMS:

Duane will check cart widths and estimate whether 2 can pass in Linac  
Bill will get new equipment cross-section for Linac tunnel.  
Elaine will contact Jay Theilacker/Arkadiy Klebaner for attendance at next meeting  
Elaine will try to get information from SNS about tunnel width

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